Funding for the *Equipment Project – Video Service Project*

Description:
The ICN has received appropriations and allocated additional ICN funds to replace the manufacture discontinued video platform with an IP product.

Many new video applications for education, medical and other government services are moving to Internet Protocol (IP) technology. Capabilities offered by the new equipment would allow more simultaneous "IP" sessions and better quality Video over IP conferences than are currently supported. Availability of the IP option meets the current and future needs of the educational community as more video sites deploy and utilize IP connections.

Progress:
The FY2010 funding was used to purchase the core equipment necessary to provide an IP video solution for the existing and new customers. This essentially completes the core purchase, and the equipment is pending installation. The team is currently pursuing rate approval to launch the product and the initial customers to be migrated are being determined. There are beta customers using the service and pending installation to smooth the transition for migration and new requests once the product is launched.

Total Estimated Cost of the Project:
The IP video equipment migration project is anticipated to cost approximately $5.1 M, including the funds that have been spent and appropriated. Table 1 includes the number of sites to be migrated and an average rate for the mixture of codecs to be deployed; these values were determined by input from the VSP Rate Team.

Table 1. Appropriations and Spending for the Equipment Project

Revenue Sources	Project	Fiscal Year	Funded Amount	Expended	Encumbered	Avl. Balance	Est. Completion Date
ICN Funds	Core/Software	NA	$339,644.28	$339,644	$ 0	$ 0	6/30/2010
0943/04U10	Core	2010	$ 1,124,619	$1,008,640	$ 1,124,619	$ 0	12/15/11
0943/04U11	158 edge / test	2011	$ 1,150,000	$ 0	$ 45,090	$ 1,072,007	06/30/13
0943/04U12	152 edge	2012	$ 1,100,000	$ 0	$ 0	$ 1,100,000	12/31/2014
ICN Funds	131 edge	NA	$ 1,400,000	$ 0	$ 0	$ 1,400,000	12/31/2015

ICN Video Services Project Timeline and Milestones:

- May 2010 – An Invitation to Bid (ITB) was awarded for Polycom RMX 4000
- July 2010 – First internal beta testing for interoperability application begins
- October 2010 – First pilot customer goes live (Belle Plaine High School)

- February 2011 – VSP's IP Video Service Plan Proposal approved by ICN management
- May 2011 – Invitation to Bid (ITB) awarded for Polycom Core solution planning, design, training, maintenance, and support
- September 2011 – IP video rates presented to ICN's Commission (ITTC); ITTC approved a "comment and review" period through October 18, 2011
- September 19, 2011 – Polycom On-Site Implementation of Core Equipment.
- September 26, 2011 – Polycom ICN Technical Training, On-Site, Week 1
- October 3, 2011 – Polycom On-Site Network Assessment/Design Concludes
- October 24, 2011 – Polycom ICN Technical Training, On-Site, Week 2
- Q1 (First Quarter), 2012 – Limited Marketing Offering Rollout
- Summer 2012 – General availability (GA) of ICN's IP Video Conference service
- Summer 2014 – MPEG anticipated "end-of-life" timeframe
- Ongoing Analysis
    - At 50% completion of the video migration, ICN will re-evaluate standard scheduling platforms to replace VOSS
    - Features and products will be added or adjusted to meet demands of authorized users
    - A list of interoperable (tested) codecs will be developed

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Des Moines Metronet

The Des Moines Metronet is a group governed by a 28E agreement between the ITTC (ICN), Des Moines Independent School District, and the City of Des Moines. The 28E establishes and provides for the planning, design, construction, operation, and maintenance of a shared communication system to serve the telecommunication needs of participating authorized users. For example, if the City of Des Moines required a fiber-optic cable installation to operate its traffic control system, and an ICN authorized user and/or Des Moines school location was along the same path, a single construction project was initiated and fibers allocated to the three partners. This saved taxpayers the expense of three separate fiber-optic construction projects, and reduced future maintenance costs by allocating any operational expense on a proportional share among the partners. The ICN provides the maintenance/repair coordination and action as needed, and in exchange is allocated a proportional share of fiber strands within a sheath owned by the City.

The ICN manages in excess of 144 miles of shared use fiber sheath in the Des Moines metropolitan area. On average the ICN has access to 12 strands of fiber in each sheath.

Additional similar agreements are in place to connect schools, Dept. of Transportation (Intelligent Transportation System), Dept. of Public Safety, and Polk County (911 dispatch) locations with Des

Moines suburbs including Windsor Heights, Urbandale, Clive, West Des Moines, and Pleasant Hill.

Part I, II, III Descriptions

Parts I and II of ICN's fiber-optic and electronic infrastructure originally connected the first 103 endpoints (one in each of Iowa's 99 counties, plus one at each of the three Regent universities and one at Iowa Public Television), and is owned by the State of Iowa.

Though those sites are still connected, the ICN classifications have changed over time for the Regent Universities and Iowa Public Television.

Part I – community colleges. Major hub sites.

Part II – added locations to have a presence in each of Iowa's 99 counties.

Part I and Part II sites make up the majority of the sites on the rings that make up the network (excluding the Des Moines Metro ring).

Part III is mostly leased by the State of Iowa and connects sites in the accredited public and non-public school districts.

ICN currently tracks equipment in 1206 sites:

- 4 - Federal Sites
- 116 - Health Care Sites
- 8 - Vendor Sites
- 44 - National Guard Sites
- 15 - Part I Sites
- 88 - Part II Sites
- 506 - Part III Sites
- 22 - ICN sites
    - Headquarters (2) = JFHQ and Lucas Building;
    - Regens (17) = where distance requires the signal be regenerated so that it may reach the destination;
    - Switch Points (3) = where multiple fiber paths cross
- 8 - IPTV transmitter Sites
- 6 - University Sites (Comprised of ISU, U of I, UNI, Drake)
- 389 - Other authorized user Sites – ICN has equipment at the customer location. In most cases, a vendor provides a leased connection to these locations.